

[0049] The data and information which are communicated between base station 32 and portable computer system 100 are the same type of information and data that can conventionally be transferred and received over a public telephone wire network system. Additionally, in FIG. 2A, the existing telephone network could also be a packet-based network, utilized by some conventional portable computer systems. However, a wireless communication interface is utilized to communicate data and information between portable computer system 100 and base station 32. It should be appreciated that one embodiment of a wireless communication system in accordance with the present invention is the Mobitex wireless communication system. Furthermore, any wireless network, in addition to the Mobitex wireless network, can support the functionality to be disclosed herein.

[0050] FIG. 2B illustrates another embodiment of a system 51 that can be used in conjunction with various embodiments of the present invention. System 51 comprises a host computer system 56 which can either be a desktop unit as shown, or, alternatively, can be a laptop system 58. Optionally, one or more host computer systems can be used within system 51. Host computer systems 58 and 56 are shown connected to a communication bus 54, which in one embodiment can be a serial communication bus, but could be of any of a number of well known designs, e.g., a parallel bus, Ethernet Local Area Network (LAN), etc. Optionally, bus 54 can provide communication with the Internet 52 using a number of well-known protocols.

[0051] Importantly, bus 54 is also coupled to a cradle 60 for receiving and initiating communication with portable computer system 100. Cradle 60 provides an electrical and mechanical communication interface between bus 54 (and anything coupled to bus 54) and the computer system 100 for two-way communications. Portable computer system 100 may instead be coupled to host computer systems 56 and 58 via a wireless (radio) connection. Computer system 100 also contains a wireless infrared communication mechanism 64 for sending and receiving information from other devices. Additionally, in FIG. 2B, the existing telephone network could also be a packet-based network, utilized by some conventional portable computer systems.

[0052] With reference to both FIGS. 2A and 2B, it is appreciated that portable computer system 100 can be used in a network environment combining elements of networks 50 and 51. That is, as will be seen below, portable computer system 100 can include both a wireless infrared communication mechanism and a signal (e.g., radio) receiver/transmitter device.

[0053] FIG. 3A is a perspective illustration of the top face 100a of one embodiment of the palmtop computer system 100 of the present invention. The top face 100a contains a display screen 105 surrounded by a bezel or cover. A removable stylus 80 is disposed along the right side of portable computer system, but by virtue of the angle of the illustration, is not shown. The display screen 5000 is a flexible display panel able to register contact between the screen and the tip of the stylus 80. The stylus 80 can be of nearly any material to make contact with the screen 5000. The top face 100a also contains one or more dedicated and/or programmable buttons 75 for selecting information and causing the computer system to implement functions. The on/off button 95 is also shown.

[0054] It should be appreciated that in one embodiment of the present invention, portable computer system 100 may be

equipped with a front cover 175, adapted to provide protection against damage to display screen 5000, and removably coupled to portable computer 100, as shown in FIGS. 3A and 3B.

[0055] It should be appreciated that when portable computer 100 is equipped with a front cover 175, in one embodiment of the present invention, front cover 175 may rotate as shown by the arrow, about the axis, or hinge, as shown in FIG. 3A.

[0056] In another embodiment of the present invention, portable computer 100 may be equipped with a front cover 300 that is configured with a multi-sided two-sided flexible display panel integral with the front cover, such that there is a front flexible display panel and a rear flexible display panel.

[0057] It should be appreciated that when portable computer 100 is equipped with a front cover 300, in one embodiment of the present invention, front cover 300 may rotate as shown by the arrow, about the axis, or hinge, as shown in FIG. 7.

[0058] FIG. 3A also illustrates a handwriting recognition pad or "digitizer" containing two regions 106a and 106b. Region 106a is for the drawing of alphabetic characters therein (and not for numeric characters) for automatic recognition, and region 106b is for the drawing of numeric characters therein (and not for alphabetic characters) for automatic recognition. The stylus 80 is used for stroking a character within one of the regions 106a and 106b. The stroke information is then fed to an internal processor for automatic character recognition. Once characters are recognized, they are typically displayed on display module 5000 for verification and/or modification.

[0059] FIG. 3B is a rear angled perspective illustration 100b of the back face and the back of front cover 175 of portable computer system 100 of FIG. 3A, in one embodiment of the palmtop computer system that can be used in accordance with various embodiments of the present invention. An extendible antenna 85 is shown, and also a battery storage compartment door 90 is shown. Portable computer system 100 is shown as having optional data storage device receptacle 140, adapted to receive optional data storage devices, e.g., memory sticks, secure data cards, and the like. A communication interface 180 is also shown. Also shown is front cover 175. In one embodiment of the present invention, the communication interface 180 is a serial communication port, but could also alternatively be of any of a number of well-known communication standards and protocols, e.g., parallel, SCSI (small computer system interface), Firewire (IEEE 1394), Ethernet, etc.

[0060] FIG. 3C is an exploded view of the palmtop computer system 100 in accordance with one implementation. It should be noted that front cover 175, as depicted in FIGS. 3A and 3B, is not shown so as to simplify the description of the exploded view of portable computer 100. Computer system 100 contains a back case half 245, and a front case half 210 having an outline of region 106 and holes 75a for receiving buttons 75b. Flexible display panel 500 is disposed on front case half 210, analogous to the flexible display panel of FIG. 3A. Disposed beneath flexible display panel 500 is flexible touch sensor 501. A battery 215 provides electrical power. A contrast adjustment (potentiometer) 220 is also shown, as well as an on/off button 95. A flex circuit 230 is shown along